

sis. In addition to colonization with a single species, the combination of different fungal species may be of interest.

Methods: In a prospective study we analyzed samples taken from 411 patients after admission to our ICU. Swabs from nostril, throat and anus and specimens of tracheal secretions and urine were taken and cultured on CHROM-Agar.

Results: Positive results were found in 798 (42.7%) of all 1868 samples. Of these, 618 were positive for a single species, 158 for two species, and 22 for three species. Concerning distribution of species, we found *Candida albicans* in 69.3%, *Candida glabrata* in 34.8% and *Candida tropicalis* in 8.1% of all positive specimens. In 90 cases, cultures grew *Candida albicans* together with *Candida glabrata*, in 23 cases, *Candida albicans* together with *Candida tropicalis*, in 12 cases, *Candida albicans* together with *Candida glabrata* and *Candida tropicalis*. Most frequently, a mixed colonization was detected from throat swabs (74 mixed, out of 281 positive cultures, 26.3%), followed by tracheal secretions (35 mixed, out of 153 positive cultures, 22.9%) and anal swabs (48 mixed, out of 235 positive cultures, 20.4%). In contrast, a mixed colonization was significantly less frequent in nasal swabs (18 mixed, out of 136 positive cultures, 13.2%) and in urine (5 mixed, out of 56 positive cultures, 8.9%).

Conclusion: A large proportion of samples showed growth of yeasts. Out of culturally positive, in 22.6% were found more than one species. Colonization with more than one species was found to be significantly more frequent in throat, trachea and anus compared to nose and urine.

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Recent trends of *Candida* epidemiology in cancer and non-cancer patients

M. Karthaus^{1,*}, R. Biedenkopf¹, M. Hentrich², X. Schiel², I. Schuth³, G. Schwarzkopf-Steinhauser⁴

¹ Klinikum Neuperlach/Tumorzentrum München Süd, Munich, Germany

² Klinikum Harlaching, Munich, Germany

³ KKS&C, Coblenz, Germany

⁴ Klinikum München, Munich, Germany

Background: In recent years a shift towards *Candida* non *albicans* has been reported from candidemia trials. A species shift in candidemia is important, since newer guidelines favor upfront echinocandins containing an economic burden. This has to be balanced with medical needs. Trends of epidemiology outside of controlled trials are therefore of particular interest.

We analyzed all *Candida* isolates from five Munich teaching hospitals (3500 beds). The objective was to compare all *Candida* isolates and all candidemia eps in 2008 and 09 with the previous 2ys (data in brackets).

Methods: Between 01/08 and 10/09 a total of 15258 *Candida* isolates were detected. No routine azole prophylaxis was given beside high risk cancer pts. There was no hint for a seasonal cluster during the study periods.

(4.6%), while in 1,74% *C. krusei* was detected. 384 isolates were obtained from two hemato-oncology units with *C. albicans* 52, 3% (80.5%) ahead of *C. glabrata* 8,1% (7.8%), *C. tropicalis* 5,4% (4.7%) and *C. krusei* (1.9%). A total of 148 isolates were detected from blood cultures. *C. albicans* was found to be less common in candidemia 57,5% (58.9%), but dominated far ahead of *C. glabrata* 17,1% (20.9%), *C. tropicalis* 6,8% (7.0%), *C. parapsilosis* 4,8% (5.4%) and *C. krusei* 2,7% (3.1%). 28.6% of candidemia eps was by *C. glabrata* in cancer pts in 2008 an 09.

Conclusion: Although a shift towards *C. non albicans* has been described elsewhere, our study indicated *C. albicans* remains the leading species. No further shift to *C. glabrata* and *C. tropicalis* has been observed within the last 4 years. If *Candida* is found, *C. glabrata* is detected about 2.3-fold more often and accounts for 17% of candidemia eps, with an even 3.8-fold higher risk in cancer pts. Echinocandins, newer azoles and lipid AmB therefore seem to be justified for upfront candidemia Rx, in particular cancer and those pts with an unstable clinical condition.

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30.005

Anti-Saccharomyces cerevisiae (ASCA) antibody levels in a subgroup of patients with ulcerative colitis, Crohn's disease, GI Behcet, and GI tuberculosis: Correlations with disease duration, activity, and extension

M. Aslan^{1,*}, B. Kocazeybek¹, A. Celik², Y. Erzin³, I. Hatemi², G. Hatemi², H. Yazici²

¹ Istanbul University Cerrahpasa Faculty of Medicine, Turkey, Turkey

² Istanbul University Cerrahpasa Faculty of Medicine, Istanbul, Turkey

³ Yeditepe University Medical Faculty, Istanbul, Turkey

Background: Clinical utility of serological markers in inflammatory bowel disease (IBD) diagnosis and differentiating is controversial. Recently ASCA has been found to have some correlation with the complication and recurrent surgery rate. Our aim was to seek for correlations between ASCA levels and disease duration, extension, activity, CRP levels, and use of immunosuppressive therapy.

Methods: A total of 41 consecutive patients (16 UC, 20CD, 3 GI BD, and 2 GI Tb; 34 women, 7 male) were analyzed regarding ASCA IgG levels with anti-ASCA IgG ELISA kit (Euroimmune, Lübeck, Germany), the cut-off value being 15 U/ml. Disease activity was assessed using SEO for UC and CDAI for CD, GI BD, and GI Tb patients, respectively. Additionally, a simplified endoscopic extension score was used by dividing the colon into six equal units and accepting ileal involvement as an additional unit in an ordinal manner. SPSS 15 for Windows is used for data collection and are expressed as means, with SD of the mean calculated when appropriate. Correlations were sought using Pearson's and Spearman's correlation coefficient and multivariate analysis was performed by using a stepwise regression model. $p < 0.05$ was regarded as significance.

Results: The mean age (\pm SD) of patients was 37.31 ± 10.65 years, 83% of them being female, and 14 out of 41 (34%) patients were in an active phase of the disease. ASCA IgG levels significantly were correlated with symptom duration \times disease extension score factorial ($r=0.481$, $p=0.001$), disease duration \times disease extension score factorial ($r=0.468$, $p=0.002$), and SES-CD ($r=0.480$, $p=0.001$). No correlations were noted between ASCA and CRP levels and clinical activity. On age-sex adjusted stepwise regression analysis, symptom duration, disease duration, disease extension, and SES-CD entered into the model, disease extension score was found to be the only independent predictor of ASCA IgG levels ($R^2=0.1$, $p=0.044$).

Conclusion: Although the aetiopathogenesis of inflammatory bowel disease remains unsolved, a serologic anti-microbial response exists one of them being ASCA. Disease and symptom duration, disease extension but clinical activity have significant correlations with ASCA levels pointing out to the importance of sustained immunological stimuli as a triggering process. These results might provide new insights into the mechanisms of epithelial responses to antigens and ideas for therapies.

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Clinical utility of perinuclear antineutrophil cytoplasmic antibodies and anti-Saccharomyces Cerevisiae antibodies for discriminating specific intestinal inflammations

B. Kocazeybek^{1,*}, M. Aslan¹, Y. Erzin², A. Celik³, I. Hatemi³, G. Hatemi³, H. Yazici³

¹ Istanbul University Cerrahpasa Faculty of Medicine, Turkey, Turkey

² Yeditepe University Medical Faculty, Istanbul, Turkey

³ Istanbul University Cerrahpasa Faculty of Medicine, Istanbul, Turkey

Background: The role of perinuclear antineutrophil cytoplasmic antibodies (pANCA) and anti-Saccharomyces cerevisiae antibodies (ASCA) assessment in inflammatory bowel disease (IBD) diagnosis and differentiating is still imprecise and controversial.

Methods: The aim of the study was to determine the accuracy of pANCA and ASCA in patients with specific intestinal inflammations, namely UC, CD, GI Behcet (GI-BD), GI tuberculosis (GI-TBC) which are under the same inflammatory bowel registry, compared to tree control groups; namely, Celiac disease, irritable bowel syndrome (IBS) patients and healthy controls (HC). A total of 493 subjects (102 with UC, 63 with CD, 13 with GI BD, 10 with GI Tb, 130 with IBS, 10 with Celiac disease, and 165 HC) firstly admitted to our weekly IBD outpatient practice of a tertiary referral center were analyzed regarding pANCA and ASCA Ig A-G via immunofluorescent assay (IFA) with commercially available IFA kits (Euroimmune, Lübeck, Germany).

Results: The prevalence of any pANCA or ASCA positivity and age and sex of patients are summarized in Table 1. In UC patients the prevalence of pANCA was 42.2%, which was significantly higher than in CD-4.8% ($p=0.000$). ASCA was found significantly more often in CD-54% than in UC

patients-4.8% ($p=0.000$). The prevalence of ASCA in BD patients-15.4% disclosed a significant difference compared to CD patients ($p=0.014$), but the prevalence of ASCA in TBC patients showed no significant difference compared to CD or BD patients.

Table 1: Prevalence of pANCA and ASCA in different subgroups. Marked values ($p < .05$)

	pANCA(+)	ASCA(+)	age	male(%)
IBS (n = 130)	1(0.8%)	4(3.07%)	40.84(SD 12.69)*	42.3(a)
HC (n = 165)	1(0.6%)	7(4.2%)	35.07(SD 10.49)*,**	40(b)
UC (n = 102)	43 (42.2%)	11(10.8%)	40.72(SD 13.44)**	50(c)
CD (n = 63)	3 (4.8%)	34(54%)	37.56(SD 12.65)	38.1(d)
GI-BD (n = 13)	0	2(15.4%)	32.11(SD 8.89)	61(e)
Celiac Disease (n = 10)	0	4(40%)	36.77(SD 7.94)	0(a;b;c;d;e;f)
GI-TBC (n = 10)	1(10%)	3(30%)	(SD 9.96)	70(f)

Conclusion: Our results confirm that in clinical practice ASCA is not specific enough to be a useful tool in differential diagnosis of any specific inflammation. However, it may have some value in screening of normal population for any bowel inflammation. pANCA may have a better clinical value in the discrimination of UC from other intestinal inflammations.

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Comparative studies on the in-vitro activity of pentamycin against non-albicans Candida species and Saccharomyces cerevisiae in 161 clinical isolates

C. Winnips^{1,*}, W. Buzina², B. Dupont³

¹ Lumavita AG, Basel, Switzerland

² Institute of Hygiene, Microbiology and Environmental Medicine, Medical University of Graz, Graz, Austria

³ Service de Maladies Infectieuses et Tropicales, Hôpital Necker-Enfant Malades, Paris, France

Background: Pentamycin is a broad-spectrum polyene macrolide and the available intravaginal formulation (FemiFect®, 3mg vaginal tablets, Lumavita AG, Basel, Switzerland) is effective in the treatment of vaginal trichomoniasis, candidiasis sustained by *Candida albicans* and mixed infections (Clin. Ter. 92: 137-142, 1980; Internet Journal of Gynecology and Obstetrics 11(1), 2009). Because yeasts other than *C. albicans* are frequently isolated in recurrent or mixed forms of vaginal mycoses, it is important to assess the activity of pentamycin against these species, which also exhibit reduced susceptibility to conventional antimycotic drugs. Therefore, the objective of this study was to compare the in-vitro activity of pentamycin with that of nystatin, amphotericin B, and fluconazole against strains of nonalbicans candidal species and strains of *Saccharomyces cerevisiae* isolated from medical samples.

Methods: Two collections of clinical isolates included in total 40 strains of *C. glabrata*, 41 strains of *C. parapsilosis*, 30 strains of *C. tropicalis*, 30 strains of *C. krusei* and 20 strains of *S. cerevisiae*. In-vitro susceptibility testing was performed using the broth microdilution method developed by the Clinical and Laboratory Standards Institute (CLSI), document M27-A2. The minimal inhibitory concentration (MIC) of each tested drug was read visually after 24 hours and 48 hours of incubation.

Results: The MIC at which 90% of strains of each yeast species were inhibited (MIC90) after 48 hours of incubation